

North Baja Pipeline, LLC NORTH BAJA PIPELINE EXPANSION PROJECT

Appendix H-1 Traffic Management Plan for 18th Avenue

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Appendix H-1

Traffic Management Plan for 18th Avenue

1.0 INTRODUCTION

North Baja Pipeline, LLC (North Baja), will construct the North Baja Pipeline Expansion Project (Project), a new natural gas pipeline from the U.S.-Mexico border to the existing North Baja facilities and the El Paso Natural Gas System in Ehrenberg, Arizona. The Project includes three elements: the B-Line, which includes interconnection facilities in Ehrenberg, Arizona, as well as a 79.8 -mile, 42- and 48-inch-diameter pipeline between Blythe and the Mexican border; the Arrowhead Extension, which includes a meter station and a 2.1-mile, 36-inch-diameter pipeline extending from the proposed B-Line at milepost (MP) 7.4 to Southern California Gas Company's existing Blythe Compressor Station; and the Imperial Irrigation District (IID) Lateral, a 45.7-mile, 16-inch-diameter pipeline between North Baja's mainline and the IID El Centro Generating Station. The Project will be constructed in phases, with the first phase planned for construction in 2007, the IID Lateral for 2008, and the final phase of the Project in 2009, pending completion of upstream liquefied natural gas (LNG) terminal facilities.

In 2002, North Baja constructed the 36-inch/30-inch A-Line of which the 36-inch segment generally is installed in the north edge of 18th Avenue. Between MPs 2.3 and 10.4 of the B-Line, the pipeline will be placed generally within the south edge of 18th Avenue, as shown on the Pipeline Route General Vicinity Map, Exhibit A. This document describes North Baja's Traffic Management Plan to be employed during construction of the 42-inch B-Line along the south side of 18th Avenue.

2.0 ROUTE DESCRIPTION – 18TH AVENUE AND VICINITY

On the west side of the Colorado River, the pipeline will turn south through fallow and/or irrigated agricultural land for about 1.8 miles (MP 0.5 to MP 2.3), and will be installed adjacent to the existing 36-inch North Baja A-Line which is adjacent to the east side of the D-10-13 Canal levee road to the 18th Avenue extension.

Exhibit B shows the general location of the pipeline route in relation to 18th Avenue and shows the orientation of the detailed maps that comprise Exhibit C.

At the intersection of the D-10-13 Canal and the 18th Avenue extension, the 42-inch-diameter pipeline will turn west and will be installed within the 18th Avenue extension (a dirt road) using a 120-foot-wide right-of-way, consisting of North Baja's existing 50-foot-wide right-of-way, and 70 feet of new temporary workspace, for about 0.6 mile. At the D-10 Canal, 18th Avenue becomes paved and remains paved for about 7.6 miles to the intersection of Keim Boulevard. Throughout this segment, the pipeline will be installed within the road shoulder or within the paved roadway. Except for extra work spaces at selected locations, construction will be confined to the 60-footwide designated county road right-of-way, which consists of the paved road and adjacent road shoulder. Adjacent land uses along 18th Avenue are agricultural and low density residential and business uses. The pipeline route crosses eight irrigation canals, five drains, nine delivery ditches, nine roads, and one railroad. Occupants of twenty-four residences and two businesses use 18th Avenue for access. Farmers tilling the ground adjacent to 18th Avenue also require ingress and egress at points along the road. Homes and buildings will be located between 20 and 250 feet of the edge of the construction work area. The existing mainline valve lot along 18th Avenue near Lovekin Road will be expanded to add a second valve for the B-Line at MP 5.5.

3.0 TRAFFIC MANAGEMENT APPROACH

North Baja has consulted with the Riverside County Department of Public Works. Riverside County requires that construction measures comply with California Department of Transportation (CalTrans) Traffic Manual. North Baja's plan requires that the contractor comply with all relevant elements of the CalTrans Traffic Manual, Chapter 5, Traffic Controls. Key traffic control elements in the manual address:

- · Temporary traffic control;
- · Pedestrian, bicycle, and worker considerations;
- Hand signaling control;
- Types of traffic control devices; and
- Types of temporary traffic control zone activities.

Section 3.1 describes the construction considerations along 18th Avenue. Section 3.2 addresses the traffic management approach. Exhibit C is a series of 1 inch = 2,000 feet maps showing the location of the route in relation to 18th Avenue, canals, drains, railroad, and cross streets. It shows the location of construction segments and individual residences and businesses. Attachment A shows typical traffic control measures contained in the CalTrans Traffic Manual that will be implemented by the contractor.

North Baja will submit detailed construction drawings for approval by Riverside County Public Works Department as part of obtaining an Encroachment Permit.

3.1 18TH AVENUE CONSTRUCTION CONSIDERATIONS

The following summarizes the construction considerations for 18th Avenue:

Location in Relation to 18th Avenue – Construction in the paved segment of 18th Avenue will be accomplished using urban construction techniques. To minimize disruption to residences and facilitate construction across roadways, canals and drains, North Baja will locate the pipe approximately 13.0 feet south of the centerline of the pavement. North Baja proposes to confine the construction work area to the County road right-of-way with additional extra work space located along the road at major crossings such as cross streets, railroads, canals, and ditches. Certain crossings such as the operating canals, the Arizona-California Railroad, State Highway 78, and three county roads will be installed by conventional boring. All other crossings are proposed to be open cut aside from the drains whose substantial depth allows for the pipeline to be installed across the top.

Preconstruction Planning – Before construction in 18th Avenue, North Baja will obtain an amended franchise agreement and an encroachment permit from the County of Riverside Transportation Department. Design and construction methods will conform to Riverside County

requirements. Preconstruction activities will include preliminary examination of the work areas and identification of the exact location of subsurface utilities, either through visual inspection or by digging potholes at intervals along the pipeline trench. If potholing identifies a conflict between existing utilities and the pipeline centerline, then the pipeline or utility will be horizontally and/or vertically realigned to eliminate the conflict.

North Baja will contact each owner and/or tenant of the properties abutting the road to explain the construction process and identify any special conditions or concerns that need to be incorporated into the construction plans. In addition, these adjacent residents and businesses will be notified by hand-distributed flyers 2 weeks before construction.

Timing –To minimize the duration of inconvenience to residences, North Baja proposes to close sections of road where construction is active and reroute non-local traffic around these areas (while maintaining access for residents). Construction will advance along the road at an estimated 500 feet per day; however to expedite completion and thereby minimize the duration of any inconvenience to residents, construction may be active at numerous locations along 18th Avenue at any given time. Excluding repaving, direct construction impacts at any given location are estimated to last about 2 to 3 weeks.

Construction Crews –The initial plan following contractor mobilization is to have a specialized crew solely designated to the 18th Avenue work. This crew will be a self-sufficient "mini spread" experienced with work in congested areas and will have two major components. The first component being the individuals associated with the installation of the major crossings and the second component will be responsible for the installation of the pipeline sections in between the crossings. Both components of this crew will make every effort to keep unavoidable road closures or restricted access to a minimum and coordinate those closures with residences and businesses.

Safety Considerations and Access – Although 18th Avenue is not a heavily traveled roadway, there are 26 residences and businesses along the proposed route. North Baja will apply specific traffic management measures in cooperation with the County of Riverside Transportation Department. These include:

- The pipeline will be installed with a minimum of 36 inches of cover and with a minimum of 12 inches of separation from other utilities or obstructions. A minimum of 2 feet will be maintained under canals and 5 feet over drains.
- Intersections will be bored or trenched and steel plated if construction doesn't occur on consecutive days.
- Adjacent residents and businesses will be notified by hand-distributed flyers 2 weeks before construction. The flyers will include the dates of construction, the work hours, traffic detours, and contact numbers for North Baja and the contractor. Emergency response agencies will also be notified of the work schedule.
- The Underground Service Alert will be notified at least 48 hours before beginning work.

- Flagging personnel will be provided to route traffic around construction equipment and obstructions.
- Work will be scheduled during daylight hours unless alternative schedules are authorized.
- Access will be maintained to all residences or businesses except during actual trenching operations. Steel plates will be available to maintain access to driveways during periods when the trench is open.
- Non-local traffic will be detoured around construction activities.
- One lane of restricted traffic movement will be maintained through the construction area as it progresses down 18th Avenue. This will allow residences and businesses reasonable access during the construction activities.
- Where unrestricted traffic is impractical, North Baja proposes that its contractor will
 maintain at least one direction, either east or west, for exit of local traffic and access
 for any emergency traffic that may occur.
- At non-work times the work area will be secured and patrolled to minimize safety hazards associated with open trenches, heavy equipment and other construction operations.
- Open trenches will be covered or cordoned off during non-working hours. The length
 of open trench may vary with individual circumstances and interferences that may
 occur along the corridor.

Trenching and Boring – The trench depth for the portions of the pipeline between the bored crossings is expected to be 6 to 7 feet to accommodate the 42-inch pipe and maintain 36-inch of cover in accordance with USDOT Pipeline Safety Regulations. Trench depth will also be contingent on the type of soils and the quantity of ground water encountered. Spoil material from the trench will be stockpiled and spread on the work side of the right-of-way or hauled to an approved stockpile location. Because the pipeline installation is in the road corridor, no topsoil segregation is planned. Any pavement or rock materials removed during the installation of the pipeline will be hauled away to an approved landfill or other suitable location. Sheet piling and dewatering techniques such as well-pointing will be utilized, as needed, in order to ensure a safe and stable trench and bore entrance or exit holes. Pipeline trench borehole dewatering will be kept to a minimum, as is practical. North Baja will dewater to nearby canals and drains in accordance with PVID requirements.

Pipe Installation – Pipe installation into the trench will preferably be done in sections as long as practical, with the pipe sections being welded up alongside the ditch. In tight work areas, the contractor may elect to "double joint" pipe lengths into 80-foot sections at an offsite location and transport the pipe joints to the area. In addition, longer sections may be welded up at staging areas located near 18th Avenue for use in very narrow workspace zones. One pipe installation method that will be used in numerous areas along 18th Avenue is the stovepipe method. This method allows for the pipe to be welded up in the trench, one pipe joint at a time, and sequentially backfilled following coating operations. This method keeps the length of open trench to a minimum and allows for better access management.

As the pipe installation progresses, tie-ins will be done in the ditch at convenient locations to facilitate welding. Most tie-ins will occur on either side of crossings and at sites where installation methodology changes from one approach to another, *i.e.*, stovepipe to traditional pipe-lay. At these locations the ditch will be widened sufficiently to allow welders access and afford them the space necessary to complete the welds.

Backfilling and Testing – Following pipe installation and the coating of the welds, the ditch will be backfilled with the spoil material removed that meets North Baja's pipeline padding specifications, and compacted to the requirements of the County of Riverside Transportation Department. New pavement will be installed where existing pavement is removed for ditching, and the area will be opened back to normal traffic. However, during hydrostatic testing the area again will be limited to traffic of necessity as a safety precaution. North Baja proposes to test the pipeline during a time of least disruption to the local residences and businesses. A minimum 8-hour hydrostatic test period is required by North Baja.

Noise and Dust – Noise will be reduced by maintaining equipment in good operating condition, equipped with proper noise control accessories including mufflers and or sound attenuation enclosures. Noise will be monitored for equipment that may run for extended periods of time such as pumps, compressors and generators. Work will be scheduled during daylight hours unless alternative schedules are authorized. Dust will be suppressed by the use of water trucks and regular spraying.

Restoration – Following a successful test, the entire area will be cleaned up and restored to its original condition. Residential areas disturbed during construction will have all fencing, lawns and plant materials replaced to a standard equal to the preconstruction conditions. Pavement removed or damaged during construction will be replaced initially with temporary material, and later re-paved, during restoration, to the requirements of the County of Riverside Transportation Department.

3.2 TRAFFIC MANAGEMENT APPROACH

To effectively outline the traffic management issues associated with the pipe installation on 18th Avenue, the plan has been broken into segments. The plan is subject to revision as the design of the pipeline is finalized and input is received from the pipeline contractor. The segments are as follows:

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Segment 1 - MP 2.92 to MP 3.42
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Segment 2 – MP 3.43 to MP 4.00

Segment 3 – MP 4.01 to MP 5.00

Segment 4 – MP 5.01 to MP 6.00

Segment 5 – MP 6.01 to MP 7.00

Segment 6 – MP 7.01 to MP 8.00

Segment 7 – MP 8.01 to MP 9.00

Segment 8 – MP 9.01 to MP 10.00 Segment 9 – MP 10.01 to MP 10.50

Segment 1 – MP 2.92 to MP 3.42

For Segment 1 and all other segments along 18th Avenue, construction equipment and personnel will utilize the eastbound lane for pipe installation. For all of Segment 1, the westbound lane will serve as access for emergency vehicles and local residents only. One-lane traffic control along Segment 1 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include proper pavement marking, and/or signs or use of other traffic control devices that are effective under varying conditions of light and weather. These devices include but are not limited to cones, barricades, portable delineators, flexible post type channelizers, drums, and barricades. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

Near the end of Segment 1, at approximately MP 3.40, is the proposed open-cut crossing of Intake Boulevard. While the roadway is being open-cut for the installation of the pipeline, southbound traffic on Intake Boulevard will be detoured west on Seeley Avenue (16th Avenue), which parallels 18th Avenue 1 mile to the north. Northbound traffic will be detoured west on 22nd Avenue, which parallels 18th Avenue approximately 2 miles to the south. Motorists will use C & D Boulevard, 1 mile west of Intake Boulevard, for northbound and southbound traffic flow during the detour. The detour will be posted clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Intake Boulevard.

These temporary traffic control zones will be carefully monitored under varying conditions of traffic volume, light and weather to ensure that traffic control measures are operating effectively and that all devices are clearly visible, clean and in good repair.

Segment 2 – MP 3.43 to MP 4.00

From approximately MPs 3.43 to 3.95, of Segment 2, implementation of diversions will be required. Diversions are needed when traffic is directed onto a temporary roadway or alignment placed in or next to the roadway. These will be required where traffic is routed onto the road shoulder of 18th Avenue to maintain access for local residents and emergency vehicles. Diversions are accomplished by the use of adequate warning, delineation and channelization techniques, as noted above, in addition to the requirements for effective detours as outlined in Segment 1.

For the remaining .05 mile of this segment the westbound lane of 18th Avenue will be used for access and necessitate the use of proper pavement marking, signs and or use of other traffic control devices, consistent with one-lane traffic control, that are effective under varying conditions of light and weather. Modification of these traffic control measures or working conditions may be required to expedite traffic movement and to promote worker safety.

Segment 3 – MP 4.01 to MP 5.00

For Segment 3, beginning at MPs 4.01 to 4.23, the effective use of diversions will be required to allow restricted traffic to use the road shoulder along 18th Avenue for access. From MPs 4.23 to 5.00, local residents and emergency vehicles will utilize the westbound lane for ingress and egress. The traffic control measures for both of these scenarios will be implemented as outlined in Segments 1 and 2. Near the mid-point of this segment, MP 4.41 constitutes the approach to the crossing of C&D Boulevard. The proximity of the road to a canal requires the road to be conventionally bored. The boring of the road negates the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow.

Towards the end of this segment, near MP 4.93, is the proposed open-cut crossing on South Broadway Road. While the roadway is being open-cut for the installation of the pipeline, southbound traffic on South Broadway will be detoured east or west on Seeley Avenue. Traffic detoured east will use C&D Boulevard for north and south traffic flow and motorists detoured west will utilize Lovekin Boulevard. South Broadway terminates at 18th Avenue, thus relieving the need for detour measures to handle northbound traffic flow.

Segment 4 - MP 5.01 to MP 6.00

For Segment 4, beginning at MPs 5.01 to 6.00, the effective use of diversions will be required to allow restricted traffic to use the road shoulder along 18th Avenue for access. Near the midsection of this segment, MP 5.42 constitutes the approach to the crossing of Lovekin Boulevard. The proximity of the road to a canal requires the road to be conventionally bored. The boring of the road does not require that traffic be detoured but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. Following the road crossing is a 1,250-foot-long section, ending at MP 5.66, that runs north of the proposed contractor's staging area. Again, the use of diversions will be required to facilitate the use of the road shoulder for restricted vehicular access. The contractor may elect to install this portion of the 18th Avenue construction last to maintain access to the staging area during installation of all other segments.

A mainline valve for the 42-inch pipeline will be constructed adjacent to the existing mainline valve on the south side of 18th Avenue within this same 1,250-foot section.

Segment 5 – MP 6.01 to MP 7.00

Segment 5 will require the use of diversion traffic control measures to utilize the road shoulder from MPs 6.01 to 7.00 except for two small 300-foot sections, one near MP 6.10 and one near

MP 6.38, where the westbound lane will be used for access. Pertinent to this segment, near MP 6.46, is the proposed open-cut crossing of DeFrain Boulevard. While the roadway is being open-cut for the installation of the pipeline, southbound traffic on DeFrain Boulevard will be detoured east or west on Seeley Avenue and northbound traffic will be detoured east or west on 22nd Avenue. Motorists detoured east will utilize Lovekin Boulevard and motorist detoured west will use Arrowhead Boulevard, located 1 mile west of DeFrain Boulevard, for northbound and southbound traffic flow. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along DeFrain Boulevard.

Segment 6 - MP 7.01 to MP 8.00

MPs 7.01 to 7.99 will require diversion traffic control measures to utilize the road shoulder for restricted vehicular access. Diversion devices include those required for the closing of a single roadway lane and those measures required to detour traffic. The final 500-foot of this segment will use the westbound lane to provide access for local residents and emergency vehicles.

MP 7.44 is the approach to the open cut crossing of Arrowhead Boulevard. While the roadway is being open-cut for the installation of the pipeline, southbound traffic on Arrowhead Boulevard will be detoured east or west on Seeley Avenue and northbound traffic east or west on 22nd Avenue. Motorists detoured east will utilize DeFrain Boulevard and motorist detoured west will use Neighbors Boulevard (State Route 78), located 1 mile west of Arrowhead Boulevard, for northbound and southbound traffic flow. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Arrowhead Boulevard.

Segment 7 - MP 8.01 to MP 9.00

From MP 8.01 to MP 8.45 westbound lane will serve as access for local residents and emergency vehicles. When using one lane for traffic control, adequate warning, delineation and channelization techniques will be necessary. Such techniques include proper pavement marking, signs or use of other traffic control devices that are affected under varying conditions of light and weather. The quantity and type of devices will be appropriate to ensure that the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

MP 8.45 represents the proposed conventional bore of State Route 78 (Neighbors Boulevard) crossing. The boring of the road negates the need to detour traffic, but control devices, such as

signage and barriers around the bore pits, will be implemented to maintain safe traffic flow. From the west side of the highway crossing to the terminus of this segment, diversion traffic control measures will be implemented. As with all segments of construction along 18th Avenue, traffic control zones will be carefully monitored under varying conditions of traffic volume, light and weather to ensure that traffic control measures are operating effectively and that all devices are clearly visible, clean and in good repair. Modification of traffic controls or working conditions may be required to expedite traffic movement and to promote worker safety.

Segment 8 – MP 9.01 TO MP 10.00

For the entire length of Segment 8, the westbound lane will be needed to provide restricted access for local residents and emergency vehicles. One-lane traffic control along Segment 8 will be accomplished by the use of adequate warning, delineation and channelization techniques. Such techniques include, proper pavement marking, signs or use of other traffic control devices that are effect under varying conditions of light and weather. The quantity and type of devices will be appropriate to assure the driver and pedestrian have positive guidance before approaching and while passing through the traffic control zone. Flagging personnel will be employed when all other methods of traffic control are inadequate to warn and direct drivers.

Approximately halfway through this section, at MP 9.46, is the proposed open-cut crossing of Stephenson Boulevard. While the roadway is being open-cut for the installation of the pipeline, southbound traffic on Stephenson Boulevard will be detoured east on Seeley Avenue and northbound traffic east on 22nd Avenue. Motorists detoured east will then utilize Neighbors Boulevard (State Route 78), located 1 mile east of Stephenson Boulevard, for northbound and southbound traffic flow. The detour will be signed clearly over the entire length so that motorists can easily determine how to return to the original roadway. The estimated duration of the detour is two days, one day for pipe installation and one day for road restoration. Should these days not be consecutive, plating or other adequate materials will be provided over the pipeline trench to permit safe traffic flow. Access for local residents and emergency vehicles will be maintained at all times along Stephenson Boulevard.

Segment 9 - MP 10.01 TO MP 10.50

Diversion traffic control measures are needed to allow for limited traffic flow along the south shoulder of 18th Avenue between MPs 10.01 to 10.42. From MP 10.42 to the end of the segment near MP 10.50 the westbound lane will be utilized for access. As with the all other construction segments along 18th Avenue, the traffic control requirements for these two scenarios remain the same. MP 10.47 within this segment constitutes the proposed conventional road bore of Keim Boulevard. The boring of the road relieves the need to detour traffic but control devices, such as signage and barriers around the bore pits, will be implemented to maintain safe traffic flow.

EXHIBITS

EXHIBIT A 18TH AVENUE PIPELINE ROUTE GENERAL VICINITY MAP

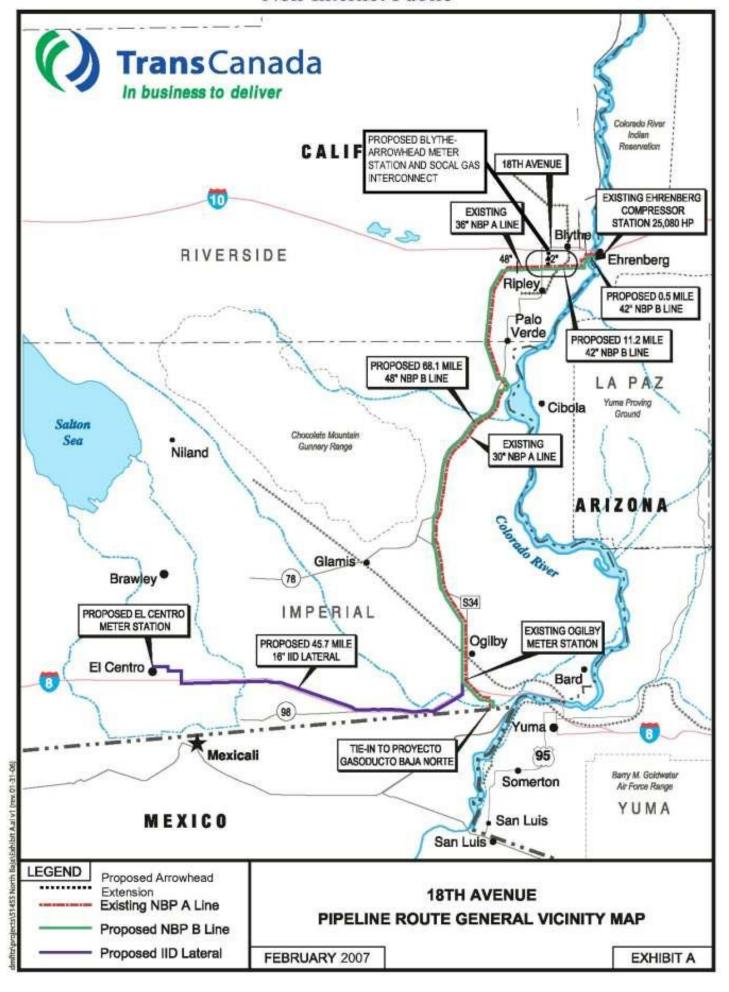


EXHIBIT B 18TH AVENUE CONSTRUCTION PLAN VICINITY MAP

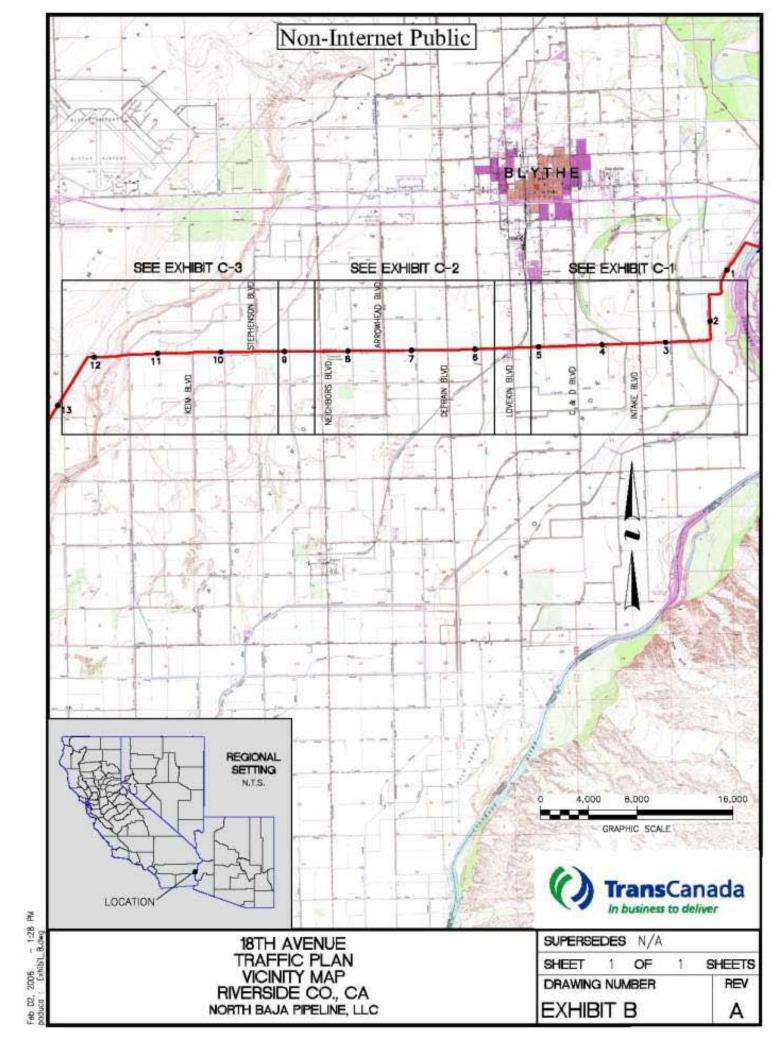
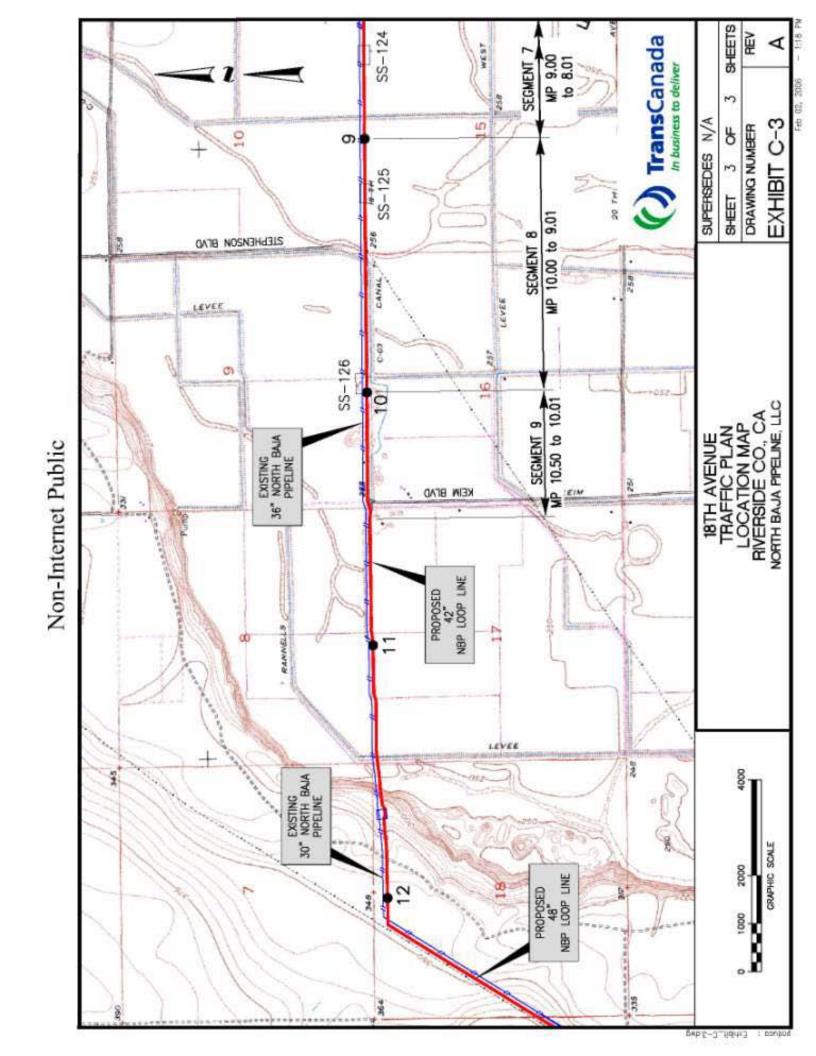


EXHIBIT C 18TH AVENUE TRAFFIC PLAN LOCATION MAP

Non-Internet Public



ATTACHMENT A TYPICAL TRAFFIC CONTROL MEASURES